

X-RAY TUBE SYSTEM AND APPARATUS WITH CONDUCTIVE PROXIMITY BETWEEN CATHODE AND ELECTROMAGNETIC SHIELD

Abstract

An imaging tube (52, 52') includes a vacuum vessel (96) and an atmospheric-side supply line assembly (104, 104'). The vacuum vessel (96) has an internal vacuum (98). The supply line assembly (104, 104') has an electromagnetic shield (94, 94'). An insulator (106, 106') separates the internal vacuum (98) from an external atmosphere (126). A cathode post (92, 92') resides within the vacuum vessel (96). The cathode post (92, 92') is in conductive proximity with the electromagnetic shield (94, 94') and prevents the bending of electrostatic field lines within the imaging tube (52, 52').